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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,082	03/03/2006	Andreas Reinhard	27793-00099USPX	1172

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WINSTEAD PC  
P.O. BOX 50784  
DALLAS, TX 75201

EXAMINER
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HOOK, JAMES F

ART UNIT	PAPER NUMBER
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3754

MAIL DATE	DELIVERY MODE
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08/08/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/543,082

Applicant(s)

REINHARD ET AL.

Examiner

James F. Hook

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 January 2007 and 14 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,7-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9 and 11-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Fuhrmann.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Rains.

Claims 1-3, 8, 11, 13, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Nichols. The patent to Nichols discloses the recited anti buckling device for thin walled ducts comprising in the longitudinal direction several ribs 27 whereby space between two adjacent ribs forms a groove, the cross section of the device fills the cross section of a duct in such a way that the duct walls lie on the ribs at a buckling point where inherently the walls cannot penetrate into the grooves, the grooves remain open and permeable for fluids when the device is bent, fluids can circulate through the

Art Unit: 3754

grooves of the device, in the longitudinal direction the ribs are interrupted to allow the grooves to be connected by way of transverse connections, where such defines structures which are knobs, where the envelope of the ends of the ribs creates an envelope which matches the interior of the tube, the device is deformable, and consists of a flexible polymer which is inherently elastic in nature, the envelope formed by the anti-buckling device in at least a portion of the length of the anti-buckling device corresponds essentially to the cross-section of the duct at the buckling or bending point.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 9, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols. The patent to Nichols discloses all of the recited structure with the exception of forming the envelope encompassed by the device to be lenticular in shape, and disclosing the Shore hardness of the material making up the device, however, it is considered an obvious choice of mechanical design to shape the member in any shape including lenticular such that it defines a lenticular shaped envelope where such would only require routine skill in the art to change the devices shape, and it would have been an obvious choice of mechanical expedients to modify the hardness of the

Art Unit: 3754

device to meet any Shore hardness as such would only require routine experimentation to arrive at optimum values as such is an obvious choice of mechanical expedients.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols in view of Atwell. The reference to Nichols discloses all of the recited structure with the exception of forming the thin walled conduit with a woven layer. The patent to Atwell discloses that it is old and well known in the art to form thin walled ducts with a woven fabric layer to provide some strength to the wall. It would have been obvious to one skilled in the art to modify the thin walled conduit in Nichols by providing a woven layer to provide added strength as suggested by Atwell where such would prevent premature failure of the thin walled duct from rupture thereby saving money.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols in view of Little. The patent to Nichols discloses all of the recited structure with the exception of forming the anti-buckling device of an elastomeric material such as rubber in place of the flexible plastic material. The patent to Little discloses the recited anti-buckling device 13 provided in a thin flexible walled tubular portion 10, which protects the thin walled tubular portion from collapsing and allowing for continual flow, where the anti-buckling device can be made of a plastic or rubber material. It would have been obvious to one skilled in the art to modify the anti-buckling device in Nichols by substituting an elastomeric material such as rubber for the plastic material as suggested by Little which teaches that such is an equivalent material used for anti-buckling devices where such is a known equivalent flexible material that would be more easily bent making the bending of the tube in Nichols easier.

Claims 4, 5, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols in view of Rains. The patent to Nichols discloses all of the recited structure with the exception of forming the anti-buckling device with structure to support a reinforced plastic tube therein, and forming the ribs on the inside of the tube wall instead of on the anti-buckling device. The patent to Rains discloses that it is old and well known in the art to form an anti buckling device such as 92 with a plurality of longitudinal ribs which support and protect a thin walled pipe 11 from being blocked as the pipe is bent to keep flow passing through the space inside the pipe 11, where it is also known to form the spacer structure as ribs extending in from the pipe such as in figures 6 and 7, and where the anti-buckling device supports a pipe 10 therein which is thereby reinforced. It would have been obvious to one skilled in the art to modify the anti buckling device of Nichols by providing structure to support and reinforce a tube therein the anti buckling device and that is equivalent to provide rib structure in the outer wall as well as suggested by Rains where such would allow for an additional tube to be added within the outer tube to improve flow there through by allowing another flow path for the fluid through the tube, and where such is equivalent structure as known in the art.

### ***Response to Arguments***

Applicant's arguments filed May 14, 2007 and January 16, 2007 have been fully considered but they are not persuasive. Many of the arguments are moot due to the dropping of many of the rejections and the forming of new rejections. With respect to

Art Unit: 3754

the argument directed at Fuhrman such is not persuasive where Fuhrman teaches the hose is flexible and therefore such would inherently be capable of bending or buckling, and that the device provided therein insures flow will continue through the ribs. With respect to the Rains reference, such does teach that the tube is bent, and that the spacer structure element keeps the space open for gas flow thereby teaching an element that is capable of preventing the flow from being cut off as the tube is bent or buckled. The same is also true of the Nichols reference which inherently teaches a tube that is flexible and therefore capable of being bent and buckled, where the anti-buckling device prevents the blockage of flow by the tight turn the tube takes, thereby teaching the same structure and function.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference to Gaylin disclosing a state of the art anti buckling device and protector.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 3754

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

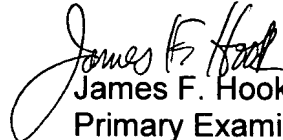
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
James F. Hook  
Primary Examiner  
Art Unit 3754

JFH